Managing Conflict in The Nigerian Construction Industry: A Study of Jos in North-central Nigeria

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Abstract

The study investigated the causes of conflict in the Nigerian construction industry and, the strategies for managing them in terms of resolutions and prevention. A quantitative approach using questionnaire survey was adopted to empirically test the opinions of construction professionals on causes of conflicts and management of conflicts in construction projects within Jos in North-Central Nigeria. The results reveal that the major cause of conflict in construction projects is "differences among team professionals" with percentage rating of 81%. The results also show that the management strategies mostly adopted in conflict resolution within the study area is "Negotiation and Re-negotiation" which is rated highest with 53%. Furthermore, the most important technique employed in conflict prevention is "Definition of roles and responsibilities" with percentage rating of 81%. The results also show that conflict occur mostly at post-contract stage (the construction Phase). The study concludes that the issue of conflict management in the construction industry has reached a point where effective use of relevant strategies such as clear definition of roles and responsibilities, allowing team members to express their views, listening to suggestion by team members can no longer be ignored by all stakeholders at all stages of projects. It is therefore recommended that harmonious working relationship with project team should be ensured and maintained right from the Conception to Commissioning of projects.

Keywords: conflict, conflict prevention, conflict management, construction.

Background to the Study

The complexity, degree of specialization and number of stakeholders in most construction projects create opportunities for misinterpretation of information and differences in opinion regarding the activities involved in the execution of projects. Therefore, project teams have to overcome an element of dispute among employers as well as between employer and contractor to reach a successful outcome. Ideally, disagreements and differences should be resolved within the employer's and contractor's working relationship as soon as they arise (Loosemore, 2000; Slumacher, 2004). In some situations, however, the contractor and employer will not be able to resolve a difference, causing it to turn into a conflict requiring to be addressed by a structured process. Furthermore, conflicts have become inherent part of human organizations world over despite the amount of energy and resources expended by organizations to prevent and resolve conflicts. Okotoni (2002) asserted that total absence of conflict in projects would be unbelievable, boring, and a strong indication that conflicts are being suppressed. This inevitability of conflict was also established earlier by Kerzner (1998) when he asserted that conflict is part of change and therefore inevitable. It is therefore not an aberration to expect conflict in the Nigerian construction industry.

Furthermore, the nature and types of conflict that occur in construction vary from one construction to another. The common types of conflict usually occur between the laborers on one hand and the project managers on the other hand. Other forms of conflict include interpersonal conflicts; higher levels of conflict include those that involve the construction team professionals as well as between the client and the professionals (Okotoni, 2002). It is important to note that the inability of project management teams to resolve conflicts effectively have impacted negatively on projects because when conflicts are allowed to linger they can explode into violence or costly litigations. Having highlighted the nature of conflicts, it is necessary to highlight a few definitions of conflicts before going ahead to present the focus of the research presented in this paper.

Conflict is defined as a state of disagreement or argument, struggle, fight between people, groups, countries etc; a situation in which you have to choose between two or more opposite needs or influences; a situation where you have two opposite feelings about something, when different people want different things, if two ideas, reliefs, opinions etc conflict, they cannot exist together (Longman Dictionary of contemporary English, 2002). According to Baron (1985) conflict is a state of anxiety and tension, generally brought about by often (contradictory) personal, group, organizational, cultural values, goals, responsibility, influences or expectations. Conflict should be seen as something that brings about progress and conflict in organization must be accepted as normal and should be used as a means of progress and not

something to be avoided. Progress can only be achieved if .effective methods and advice are used to deal with it. Conflict refers to contradictions arising from differences in the interests, ideas, ideologies, orientations and precipitous tendencies of the people involved in a relationship, business or contract. These contradictions are inherent at all levels of social and economic interactions of human race. It may therefore exist at the individual, group, institutional, national and international levels. Conflict is thus a pervasive phenomenon in human relationships and has been seen as the basic unit for understanding social existence (Nnoli, 1998).

Kezsbom (1989) stated that conflict will exist on all projects; and that in the context of project teams conflict is an inevitable occurrence with which they have to contend. Similarly, Okotoni (2002) submitted that conflict situations are inevitable in any organization simply because interactions occur on a daily basis and whenever there is any form of interactions between two or more parties, friction or misunderstanding is bound to occur. Therefore, conflict management is an overall process which comprises planning for, prevention of and resolution of conflict, together with the creation of constructive conflict management process to assist the achievement of the industry's objectives.

Breakdown in communication is the most common and most obvious source of conflict in projects. The lack of trust, respect, effectiveness in listening skills and perpetual differences can lead to serious communication problem, misinterpretation of drawing, misunderstood change order, delays in delivery of critical complains and failure to execute instructions are all results of communication breakdown (Kriesberg, 2002; Okotoni, 2002). An investigation into the nature of conflicts, their causes as well as their effects on construction is important in other to facilitate higher productivity (Lau & Rowlinson, 2011). Furthermore, the separation of design and construction roles can hinder the development of shared project goals/objectives and therefore, negatively influence project outcomes (Baiden & Price, 2011; Love, Gunasekaran, & Li, 1998).

According to Baron (1985) conflict increases the tendency of both sides to engage in negative relationship. Members of opposing groups or units tend to emphasize the differences between themselves and their opponents and to view them in an increasingly negative light. Conflict tends to make each side close ranks and emphasize loyalty to their own faction or group, against perceived enemy. Anyone who suggests, even tentatively, that the other side of the position has some merits, is viewed as a betrayer hence severely criticized. As a result it becomes increasingly difficult for opponents to take each other's perspective, a development that sharply reduces the likelihood of an effective compromise. So, conflict in projects produces many negative results which include the following:

i. Project abandonment
ii. Clients complaints
iii. Poor labour relations
iv. Quality variations, reworking and rejects.

v. Unreasonable plant waiting time
vi. Low or failing output
vii. Project not completed at the appointed time etc.

The extent of conflict today in the construction industry is a cause for great concern as most often, the conflict are suppressed with the neglect of conflict resolution methods; this in effect has affected the performances of projects. The attitudes of the project managers have not helped much as some of the conflict centered on their personality and leadership style (Yusuf, 2000). Just as the project managers are involved so also are the other workers. It is of great importance that project managers acquire the skills and tools to recognize and diagnose conflict situations, once they understand the potential sources of project conflicts, they can develop the appropriate strategy to manage it effectively. Only when project managers are able to understand and link the potential cause with appropriate strategy will they be effective conflict managers. Two realities should be recognized; first that conflict is an absolutely inevitable and predictable social phenomenon, one that will increase in all organizations as they become larger and more complex; secondly, that conflict should not be suppressed, but deliberate efforts should be made towards addressing it (Academic Association Peace works (AAP), 2004). Latham (1994) commented: "The best solution is to avoid disputes. If procedures relating to procurement and tendering are improved, the causes of conflict will be reduced. If a contract document is adopted which places the emphasis on teamwork and partnering to solve problems, that is another major step."

The study presented in this paper aims to highlight the most important causes of conflicts as well as conflict management methods in the construction industry within the study area.

Research Methods

The study covered Jos metropolis in North-Central Nigeria and is confined to conflict which occur in building projects. In order to achieve the aim, a quantitative approach was adopted to empirically test the opinions of construction professionals on causes of conflicts and management of conflicts at different stages of project. The decision to use quantitative and not qualitative method was based on the need for statistical analyses and interpretation to address the aim of the study (Creswell, 2009). A questionnaire was designed to elicit responses from construction professionals working on Building projects in Jos. Professionals in Architecture, Building, quantity surveying, Engineering, and other professionals involved in Building projects with at least five years of relevant professional experience working on Building projects with multiple stakeholders were targeted to participate in the survey. The survey respondents were asked to rate causes of conflicts in construction and conflicts management methods based on a five point Likert scale in which 1 = strongly disagree and 5 = strongly agree. The questionnaire

also gathered background information of the respondents in order to ensure that they have the required background and years of professional experience to take part in this survey before their responses are used for analyses. A minimum of 5 years relevant professional experience was set for the respondents to ensure they have participated in some projects up to completion so that they can have practical knowledge of conflict management issues.

The population of this study consist of professionals working on Building projects in Jos the total number of which is not known to the researchers due to lack of data base. Therefore, for the purpose of sampling, using an estimated response rate of 25% and targeting a minimum of 50 responses, based on the average response rate obtainable in similar research in construction management (Akintoye, 2000; Dulaimi, Ling & Bajracharya, 2003), the sample population for the current study was determined as follows: [(Minimum response × 100) ÷ Average percentage response rate] = Target population (Saunders, Lewis & Thornhill, 2009). Thus [(50 × 100) ÷ 25] = 200: Therefore the questionnaire was administered to 200 professionals randomly selected within the study area. A total of 71 responses were received representing 35.5% of the total number of respondents surveyed. Out of the 71 responses received, 7 were rejected for having less than 5 years of professional experience in construction and/or for incomplete responses. 64 responses (32% of respondents contacted) were found suitable and accepted for analysis.

Data Presentation and Analysis

Table 1 shows the distribution of the 64 responses accepted for analysis among the surveyed professionals. The statistics shows a fair representation of the key professional involved in Building projects which adds to the reliability of the data.

Table 1: Number of Professionals that Answered the Questionnaires

PROFESSION	NUMBER	PERCENTAGE
Architect	17	27%
Engineer	10	15%
Builder	16	25%
Quantity Surveyor	17	27%
Other	4	6%
Total	**64**	**100%**

The respondents were asked to indicate whether they experienced conflicts more at the Pre-contract or Post-contract stage the result of which is presented in Table 2. Table 2 shows that 28% were of the view that conflicts occur more at pre-contract stage, while 72% reckon that conflicts occur more at post-contract stage. This indicates that conflict occur mostly at post-contract stage within the study area. Detailed breakdown of the occurrence of conflicts at the Pre-contract and Post-contract sub-stages are presented in Tables 3 and 4 respectively.

Table 2: Conflict Stages in Project.

Stage	A	B	C	D	E	Total	%
Pre-contract	3	2	6	6	1	18	28%
Post-contract	14	8	10	11	3	46	72%

KEY

A - Architect
B - Engineer
C - Builder
D - Quantity Surveyor
E - Others

Table 3 shows that 14% responded that pre-contact stage of conflict occur at conception, 24% responded that it occurs at briefing, 48% at the design stage while 14% attributed it to tender. This result revealed that pre-contact stage of conflicts occur mostly at the design stage, therefore, more attention should be given during design with respect to managing conflicts at the pre-contract stage of construction projects. This may require involving all relevant stakeholders during the design stage to get their inputs.

Table 3: Pre-Contract Stage of Conflict

Pre-contract Stages	A	B	C	D	E	%
Conception	2	1	-	-	-	14%
Briefing	-	-	4	1	-	24%
Design	1	2	2	4	1	48%
Tender	-	-	-	3	-	14%
Total	**3**	**3**	**6**	**8**	**1**	**100%**

Table 4 shows that an overwhelming 84% responded that post-contract stage of conflict occurred during construction while 16% attributed it to commissioning. This result points to the need for construction management teams to pay serious attention to conflict management and related during the construction phase, at which time there is high level of interaction among the key players. This will however depend on a well articulated front end (Pre-contract stage) planning.

Table 4: Post-Contract Stage of Conflict

Post-contract Stage	A	B	C	D	E	%
Construction	12	7	8	7	2	84%
Commissioning	2		2	2	1	16%
Total	**14**	**7**	**10**	**9**	**3**	**100%**

Table 5 shows the main causes of conflict in the construction industry. The top three causes of conflict include: "Difference among team professionals" was ranked 1st with a relative index 0f 0.81; "inadequate communication" was ranked 2nd with relative index of 0.76; "inadequate team work" was ranked 3rd with relative index of 0.73. Whereas, the least three causes include: "Power struggle" was ranked 8th with relative index of 0.57; "Over dependence on one professional" was ranked 9th with relative index of 0.56; and "interpersonal relationship" was ranked 10th with relative index of 0.35. The result in Table five indicates the need for professionals involved in construction projects to work collaboratively without power struggle and put in place effective communication strategies agreed to by all.

Table 5: Ranking of Factors that Cause Conflict in the Construction Industry.

S/N	Factors	5	4	3	2	1	Rank sum	Relative index	%Rank	Rank Order
1	Difference among team professionals	33	13	10	5	3	260	0.81	81	1st
2	Inadequate Communication	24	19	12	3	6	244	0.76	76	2nd
3	Inadequate team work	22	22	5	7	8	235	0.73	73	3rd
4	Argument	26	9	15	8	5	232	0.72	72	4th
5	Superiority complex	19	12	17	9	6	218	0.68	68	5th
6	Variety of goal depend upon limited resources	20	14	7	10	11	208	0.65	65	6th
7	Too many professionals	22	10	9	8	12	205	0.64	64	7th
8	Power struggle	14	9	13	12	14	183	0.57	57	8th
9	Over dependence on one professional	13	12	9	13	16	182	0.56	56	9th
10	Interpersonal Relationship	11	3	4	9	18	115	0.35	35	10th

Table 6 shows the main strategies that are adopted in preventing conflict in the construction industry within the study area. Although, all the strategies were rated high, "Defining roles and responsibilities clearly" emerged as the major strategy that should be adopted in preventing conflict in the construction industry with a relative index of 0.81. It is closely followed by "Allowing team members to express their views" with relative index of 0.81.

Table 6: Ranking of Strategies that are adopted in Preventing Conflict in the Construction Industry.

S/N	Strategies	5	4	3	2	1	Rank Sum	Relative Index	% Rank
1	Defining roles and responsibility clearly	35	10	9	8	2	260	0.81	81
2	Allowing team members to express their views	37	9	7	6	5	259	0.80	80
3	Listening to suggestion by team members	22	15	14	8	4	232	0.72	72
4	Recognising that each person is special	18	20	9	9	8	223	0.69	69

In resolving conflict, the technique mostly employed as shown in Table 7 by the respondents is "Negotiation and Renegotiation" with 57% of the respondents choosing it. Whereas, the least popular technique is litigation with 9% of the respondents choosing it.

Tablel 7: Conflict Resolution Techniques used in the Construction Industry

TECHNIQUES	RESPONDENTS	PERCENTAGE
Negotiation and Re-negotiation	34	53%
Arbitration	14	22%
Conciliation	15	23%
Litigation	6	9%
Others--		
***Total**	**69**	**107%**

*Expected Number is 64 and expected percentage is 100 but exceeded due to multiple responses allowed in the questionnaires.

Summary and Conclusion

It is observed from the results of this research that conflict is well acknowledged in construction projects. Key among the findings can be summarized as follows:

1. The Post-contract stage is the most conflict laden stage in the life cycle of construction projects. More specifically, the construction phase of the Post-contract stage is the most conflict prone. The results also revealed that the Design phase of the Pre-contract stage is also conflict prone.

2. "Difference among team members", "inadequate communication" and "inadequate team work" are considered as the factors that are most likely to cause conflicts in construction projects.

3. The two most viable conflict prevention strategies adopted within the study area include "defining roles and responsibility clearly" and "allowing team members to express their views". Although, "listening to suggestions by team members" and "recognizing that each person is special" are ranked 3rd and 4th respectively, they both have Relative Indexes of above 0.60 which indicate that they are also considered as useful strategies for conflict prevention.
4. The most used conflict resolution technique within the study area is "negotiation and Re-negotiation" which is very encouraging being a non-adversarial conflict resolution technique.

Inspite of the negative effects of conflict to the execution of project, conflict at times do have some positive effects such as production of better ideas, people are forced to clarify their views, some conflicts stimulate interest and creativity etc. It was observed that, if construction industries have good attitude towards conflict it will lead to high productivity i.e. attitude to conflict is directly proportional to productivity in the construction industry.

It can therefore, be concluded from the result of this research that, "Difference among team professionals" is the major cause of construction conflict, followed by inadequate communication etc. Defining roles and responsibilities among construction professionals is the most used technique of preventing conflict in the construction industry. Furthermore, the post-construct stage (i.e. construction) is the stage where conflict is common in the construction industry. However, the fact that the Pre-contract stage (the Design phase) is prone to conflicts means that the issues that lead to conflict at the construction phase can be addressed during the Pre-contract stage. For proper resolution of conflict in the construction industry, the cause of the conflict must first be addressed and relevant strategies should be used effectively.

Recommendations

Based on the research reported in this paper, the following recommendations are made;

(i) During the project formation, there should be a defined plan, joint decision making and consultation with parties involved.

(ii) Detailed administrative operating procedures to be followed in conduct of the project should be developed.

(iii) Project managers and team leaders should clarify roles, responsibilities and ensure good rapport among construction professionals.

(iv) Work in progress should be continually monitored and results communicated to the parties involved.

(v) Project stakeholders must be aware of cultural differences and should demonstrate respect for different cultures of other stakeholders.

(vi) Project managers should create working environments that emphasise respect and equality as much as possible.

(vii) Parties involved in the execution of construction projects should collaborate together in preventing and managing conflict rather than competing and avoiding conflict.

(viii) Harmonious working relationship with project team should be ensured and maintained right from the Conception to Commissioning of the project.

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